

Atty. Dkt. No. EPI3007B  
(formerly TSRI 184.2C2)

In the Claims:

Please cancel claims 43-44, 48, 53, 57-59 and 96-99. All claims are shown below in accordance with the PTO's waiver of 37 C.F.R. 1.121 (a)-(d).

Claims 1-78 (Cancelled).

61 79. (Presently amended) The plant of ~~any of claims 43 or~~ claim 83, wherein said immunoglobulin molecules are present at a level of at least 56 ng/mg of total protein in extracts of said plants.

80. (Cancelled) The plant of any of claims 21, 43 or 65, wherein said immunoglobulin molecules are present at a level of at least 56 ng/mg in total protein of extracts of said plants.

62 81. (Presently amended) The plant of ~~any of claims 43 or~~ claim 83, wherein at least some of said immunoglobulin molecules are present within the cell wall of said plant cells.

82. (Presently amended) The plant of ~~any of claims 43 or~~ claim 83, wherein said immunoglobulin molecules are trafficked through the Golgi of said plant cells.

63 83. (Presently amended) A plant, comprising plant cells containing:  
a) nucleotide sequence encoding an immunoglobulin single polypeptide product containing an immunoglobulin heavy chain polypeptide, wherein said nucleotide sequence encodes a leader sequence forming a secretion signal for said single polypeptide product, said heavy chain derived from an antigen-specific immunoglobulin comprising a heavy and light chain, and said single polypeptide product being capable of forming an antigen-specific immunoglobulin when co-expressed in a plant cell the same cell with said light chain from said antigen-specific immunoglobulin and wherein said plant cells do not contain nucleic acid encoding said light chain; and

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b) immunoglobulin single polypeptide product encoded by said nucleotide sequence ~~sequences~~, wherein said leader sequence is cleaved from said polypeptide product following proteolytic processing of said single polypeptide product.

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84. (Previously added) The plant of claim 83, wherein said single polypeptide immunoglobulin product is a multimer.

85. (Previously added) The plant of claim 84, wherein said multimer is a dimer.

86. (Cancelled) The plant of claim 84, wherein said single polypeptide product is a multimer of said light chain.

87. (Previously added) The plant of claim 84, wherein said single polypeptide product is a multimer of said heavy chain.

88. (Previously added) The plant of claim 83, wherein said single polypeptide immunoglobulin product comprises a paratope.

89. (Previously added) The plant of claim 83, wherein the immunoglobulin product comprises a glycosylated immunoglobulin molecule free of sialic acid residues.

90. (Previously added) The plant of claim 83, wherein the heavy chain is selected from the group consisting of IgG, IgM, IgA, IgD and IgE.

Claims 91-92 (Cancelled).

93. (Previously added) The plant of claim 83, wherein the plant is a dicotyledonous plant.

94. (Previously added) The plant of claim 83, wherein the plant is a monocotyledonous plant.

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95. (Previ usly added) The plant of claim 83, wher in the plant is an alga.

Claims 96-99 ~~(Cancelled)~~.